Technics

Compact Disc Player

SL-P520

OPERATING INSTRUCTIONS

• These instructions also apply to units of different colour.

Before operating this unit, please read these instructions completely.

ENGLISH

Dear Stereo Fan

We want to thank you for selecting this product and to welcome you to the growing family of satisfied Technics product owners around the world.
We feel certain you will get maximum enjoyment from this new addition to your home.
Please read these operating instructions carefully, and be sure to keep them handy for convenient reference.

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Caution

This product utilizes a laser.
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Technical Specifications

■ Audio

No. of channels	2(left and right stereo)
Frequency response	4—20,000 Hz ±0.3 dB
Output voltage	2.0 V (at 0 dB)
Dynamic range	96 dB
S/N ratio	100 dB
Harmonic distortion	0.0015% (1 kHz, 0 dB)
Total harmonic distortion	0.003% (1 kHz, 0 dB)
Channel separation	100 dB
Wow and flutter	Below measurable limit
Low-pass filter	Hight Resolution Digital Filter
Output impedance	Approx. 600Ω
Load impedance	More than 10 kΩ
Headphone output level	80 mW max. 32Ω (adjustable)

■ Signal format

Sampling frequency	44.1 kHz
Correction system	Technics Super Decoding Algorithm
D-A conversion	16-bit linear

■ Pickup

Type	Fine-focus, one beam
Light source	Semiconductor laser
Wavelength	780 nm
Traverse system	High-speed linear access system
Spindle system	Brushless DD motor

■ Infrared remote-control transmitter

Dimensions (W×H×D)	65×18×155 mm
Batteries	UM-3 "AA" batteries or IEC R6 or equivalent (1.5 V×2)
Weight	140 g (including batteries)

■ General

Power supply	
For Continental Europe:	AC 50/60 Hz, 220V
For Australia:	AC 50/60 Hz, 240V
For others:	AC 50/60 Hz, 110~127V/220~240V
Power consumption	17 W
Dimensions (W×H×D)	430×87×260 mm (16-15/16"×3-13/32"×10-1/4")
Weight	4.3 kg (9.5 lbs.)

Specifications subject to change without notice.
Weight and dimensions shown are approximate.

Placement Hints

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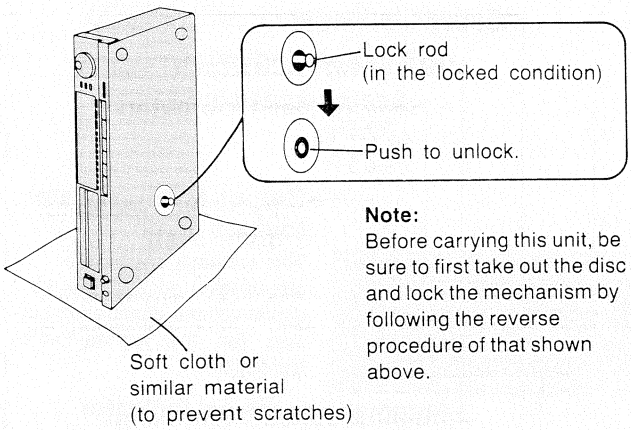
Before use

In order to prevent damage during transport, the disc-loading mechanism is locked. Be sure to unlock it before using the unit.



Note:
Before carrying this unit, be sure to first take out the disc and lock the mechanism by following the reverse procedure of that shown above.

Notes of placement

■ **Place on a flat, level surface so that the front-rear inclination does not exceed 5°.**

■ **Avoid places such as the following.**

- Near any equipment or device that generates strong magnetism. (e.g. speaker system)
- On any heat-generating equipment or device (e.g. amplifier), or in any place where the temperature is high (40°C or higher).
- Extremely cold places (5°C or below).

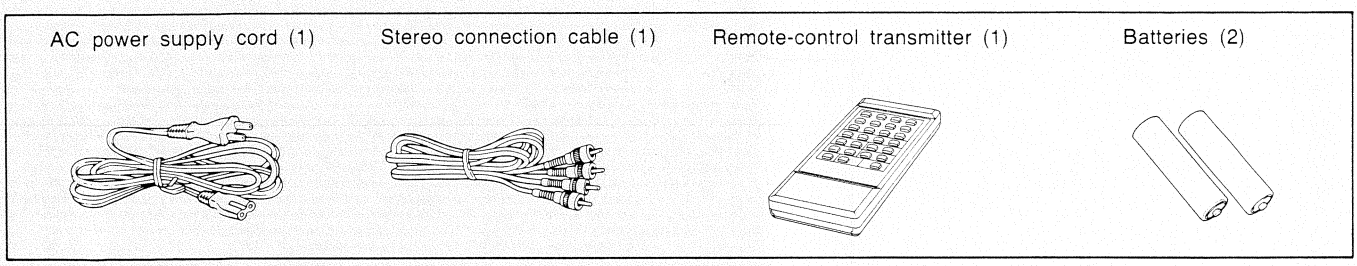
■ **Do not place heavy objects, other than system components, on top of the unit.**

Before Use

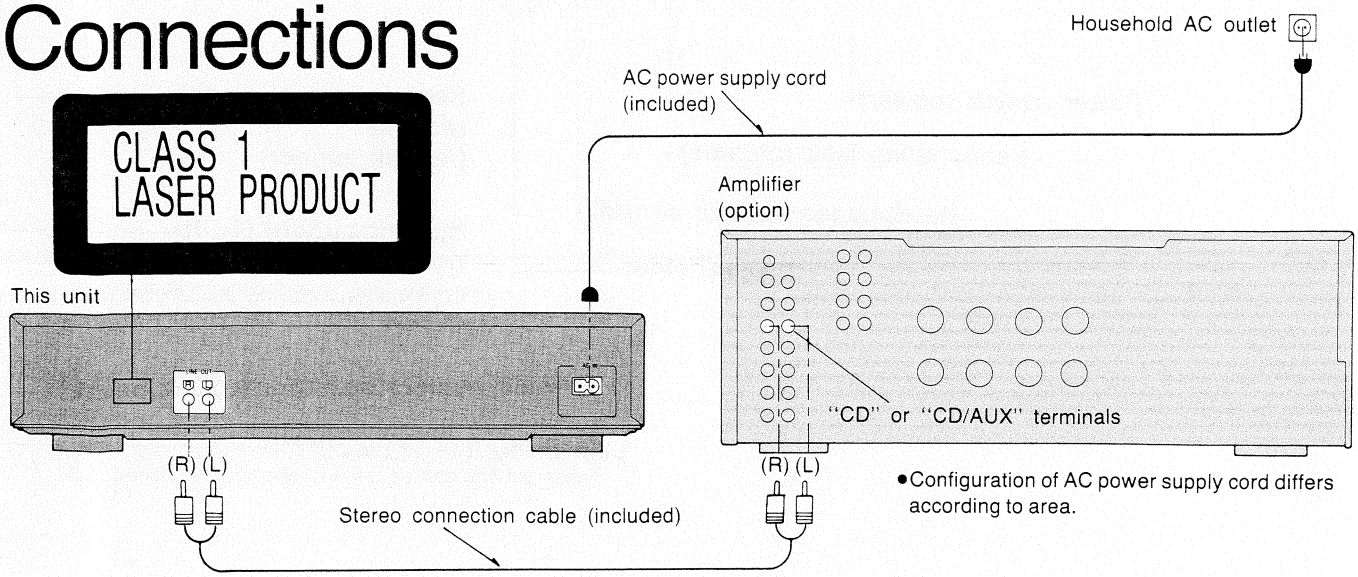
Be sure to disconnect the mains cord before adjusting the voltage selector.
Use a minus (−) screwdriver to set the voltage selector (on the rear panel) to the voltage setting for the area in which the unit will be used.

Note that this unit will be seriously damaged if this setting is not made correctly. (There is no voltage selector for some countries; the correct voltage is already set.)

Accessories



Connections



- Configuration of AC power supply cord differs according to area.

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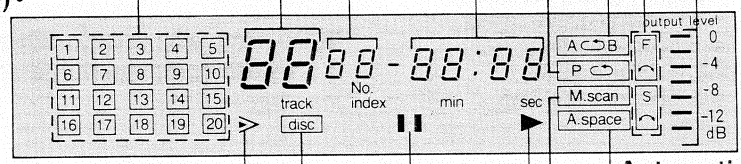
Front Panel Controls and Their Functions

Time display

Index number display (No./index)
This display shows the index number and the sequence of programmed play.

Track number display (track)
This display shows the total number of tracks or the number of the track now being played.

Music matrix (1 ~20)
The numbers of the tracks on the disc are displayed up to a maximum of twenty.



"Over" mark (≥)
The "≥" illuminates if a disc with 21 or more tracks is loaded.
The "▶" illuminates when the play starts, and when disc play reaches track 20, the "≥" indicator flashes on and off.

Disc indicator (disc)
This indicator illuminates when a disc is loaded.

Repeat indicator (⊃ , P⊃)

A-B repeat indicator (A⊃B)

Search-speed indicators (F , S)

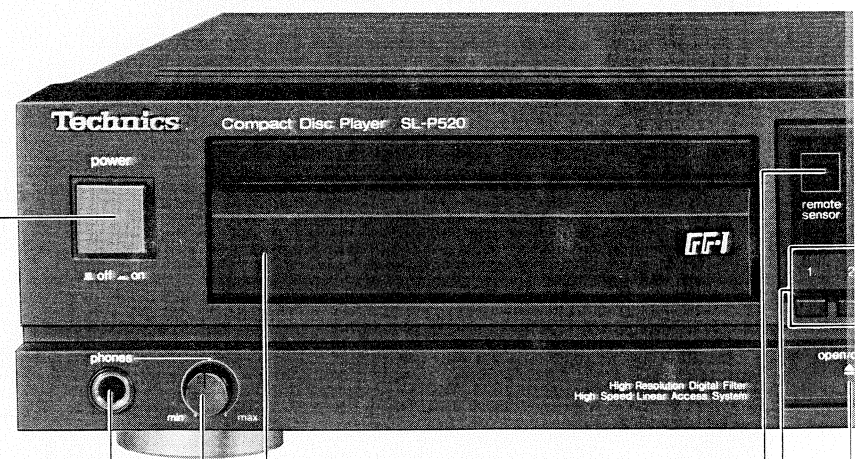
Output level indicator (output level)
This indicator shows the output level adjusted by the digital volume attenuation buttons (on the remote-control transmitter.)

Automatic space set indicator (A.space)

Music scan indicator (M.scan)

Play indicator (▶)

Pause indicator (❚❚)



Power switch (power)

Headphones jack (phones)

Headphones volume control

Disc holder

Remote-control signal receptor (remote sensor)

Numeric buttons (1~0)
These buttons can be used to select track number, play time, and the number of repeat plays.

Disc holder open/close button (open/close/⏏)

Skip buttons (skip/|◀◀ ▶▶|)
These buttons can be used to skip to any desired track.

Index button (index)
This button can be used to specify index numbers within tracks.

Clear button (clear)
This button can be used to cancel the order of play of tracks or to cancel the time programming.

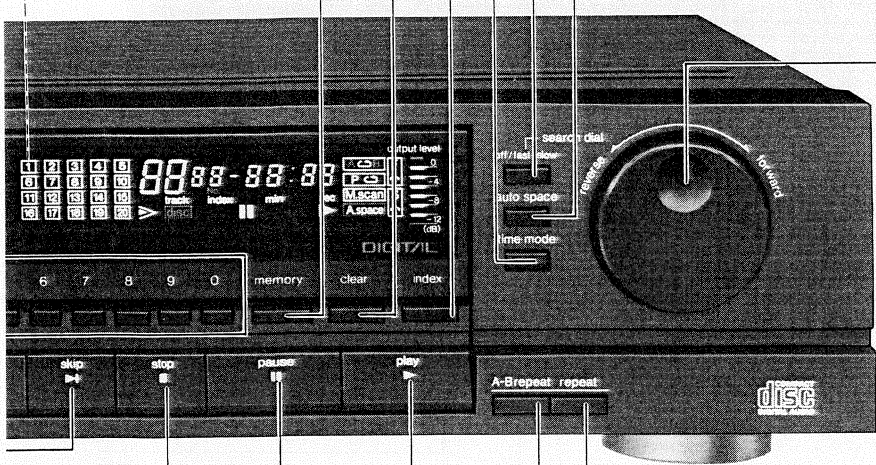
Memory button (memory)
This button is used for programming the order to play of tracks or time.

Time-display selector (time mode)
When this is pressed while a track is playing, the indication shown by the time display will change to the following four indications.
- Track number and elapsed play time of track currently being played.
- Total remaining play time on the disc (total remaining play time of programmed track if during programmed play).
- Remaining play time of track now playing.
- Total elapsed play time.

When this is pressed while the disc is stopped, the play time can be selected.

Search-speed selector (off/fast/slow)
This button can be used to select the speed at which the search dial can be used to find the beginning of the desired track.

Automatic space-set button (auto space)
A speace of about three seconds in length between tracks be made automatically.
This is useful for making non-recorded intervals, such as for recording.



Search dial (search dial)
This dial can be used to find the beginning of the desired track precisely. The search-speed selector can be used to select the speed of this operation.

Stop button (stop/■)

Pause button (pause/❚❚)

Play button (play/▶)

Repeat button (repeat)
This button can be used for repeat play.

A-B repeat button (A-B repeat)
This button can be used, during disc play, to designate repeat play between any two desired points, (A) and (B).

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Operation

The following explanation will use, as an example, a compact disc on which are recorded 7 tracks, with a total playing time of 49 minutes and 58 seconds.

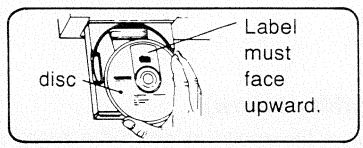
Playing a disc from beginning (automatic play)

The track will be played from the first track to the final track in order.
The operations described below are the basic operations when listening to a compact disc. Follow steps 1, 2, 3 and 5 in the same way for another performance.

1 Reduce the volume level (at the amplifier), and then switch ON the power.

2 Press ⏏ and insert the disc.

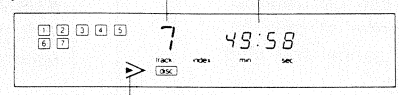
(The holder will open.)



Note:
Do not try to insert a disc until the holder has opened completely, because the disc may be scratched if it is inserted sooner.

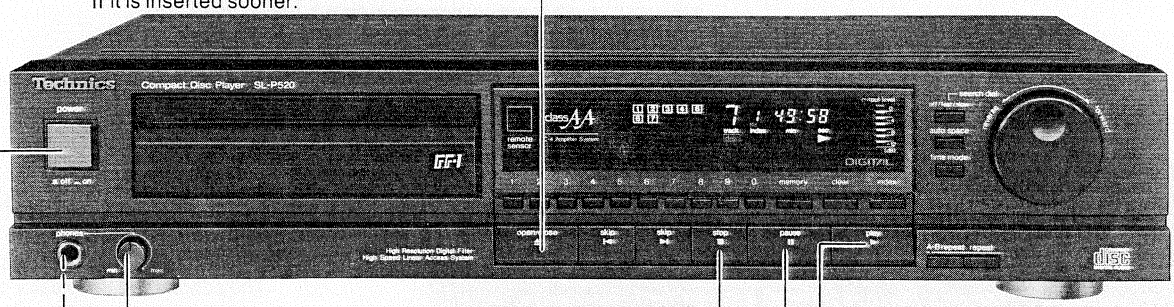
3 Press ⏏.

(The holder will close, and the disc will begin to rotate.)
The total number of tracks and the total play time will be displayed.



Illuminates when there are 21 or more tracks.

Note:
You may notice that there is a slight difference (a few seconds) between the time displayed for each track and the time shown in the notes included with the disc. This is because the displayed time includes the time between tracks.



Headphones volume control

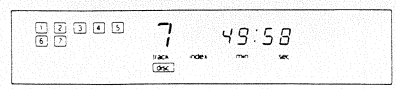
Headphones (option)

■ When listening through headphones

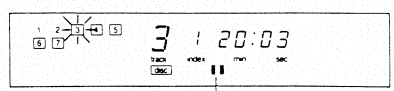
- Set the headphones volume control to low position before connecting headphones.
- Use the headphones volume control to adjust the volume while listening to music.

■ Press ■ to stop disc play.

When this button is pressed, order, etc. entered into the memory will be erased. (Refer to page 8.)
The disc will stop, and the total number of tracks and total play time will be displayed.



■ Press ⏸ to stop the play temporarily.

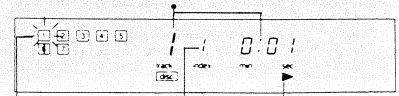


(The pause indicator will illuminated.)
Press ▶ again to resume the play.

4 Press ▶.

(Play will start.)

- If this button is pressed during play, play will begin from track 1.
  The track number and the elapsed play time will be displayed.



(The play indicator will illuminate.)
For discs without index numbers, "1" will be continuously displayed.

- The track number flashes during play, and then disappears when play finishes.

5 Use the volume control on the amplifier to adjust the volume level.

(Refer to the operating instructions of the amplifier.)

■ After use

- Take out the disc.
- Switch OFF the power.

■ Note of the rear panel

The rear panel becomes hot because of radiated heat, but this condition is not abnormal. Do not, however, touch the rear panel while the player is operating.

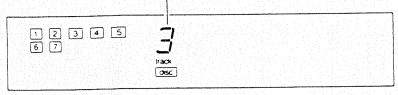
To listen immediately to a certain track (direct play)

This is played from 3rd track to the final track when you want to hear track number 3 first.

To select the track number

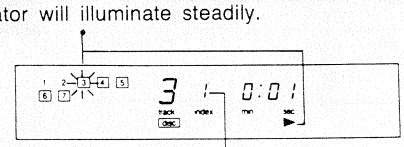
1 Press to select the track number desired.

●Track number is displayed.



2 Press ▶. (Play will start.)

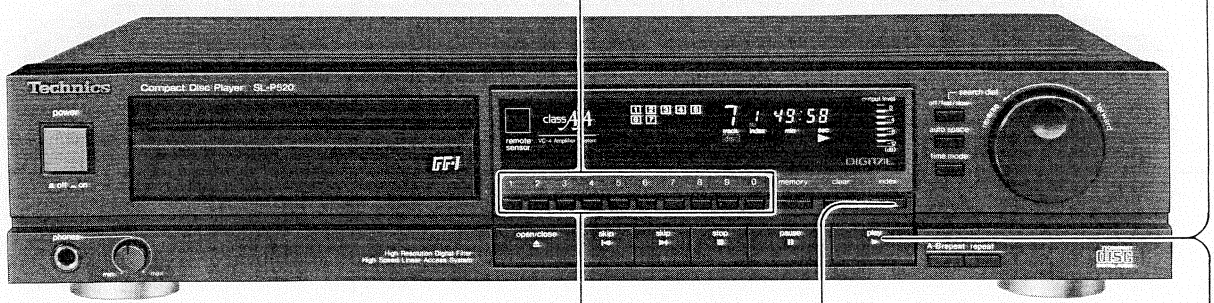
The track number indicator will flash and the play indicator will illuminate steadily.



Note:
If a track number that is non-exstent on the disc is programmed, the letter "- E" (error) in the display will be displayed.

■ When the playing of the specified track has finished.

Next recorded track will be played.



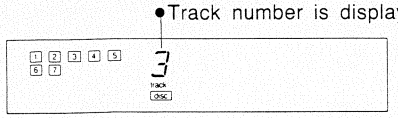
To select the index number

Limited to compact discs with index numbers.
(This is indicated in the explanatory notes accompanying the compact disc.)

●The following is based upon an example in which index number 2 of the 3rd track is selected.

1 Press to select the track number desired.

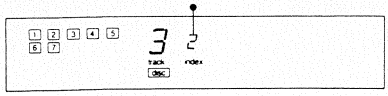
●Track number is displayed.



Note:
Be sure to specify track number 1 even if there is only one track on the disc. (If this is not done, the index number cannot be specified.)

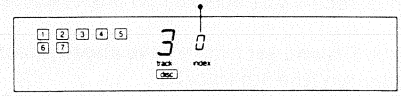
3 Press the button corresponding to the track number, and specify the index number.

(Selection can be up to a maximum of 99.)
The specified index number will be displayed.



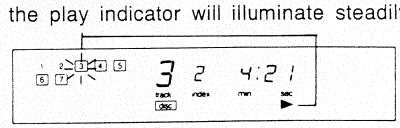
2 Press index.

Index no. "0" will be displayed.



4 Press ▶.

(Play will start.)
The track number indicator will flash and the play indicator will illuminate steadily.



Note:
If a track number that is non-existent on the disc is programmed, the last index track will be played.

ENGLISH

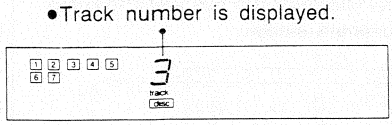
Operation (continued)

Programmed play

- To listen in any desired order. (The explanation below shows when the 3rd track is first, the 5th track second, the 1 st track last.)
- A maximum of 20 tracks can be programmed.

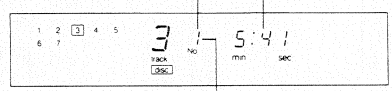
1 Press to select the track number desired.

- Track number is displayed.



2 Press memory.

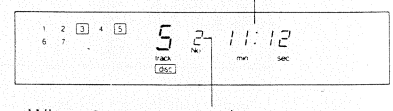
(The track number will be programmed.)
Order and play time will be displayed.



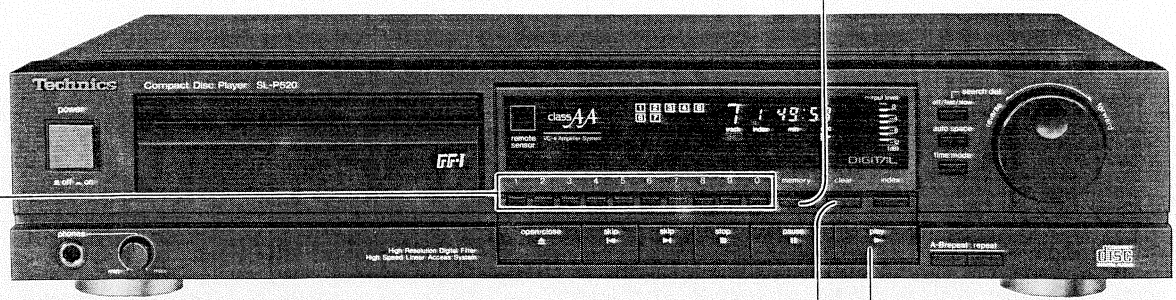
Note:
If a track number that is non-existent on the disc is programmed, the letter "- E" (error) in the display will be displayed.

3 Repeat steps 1 and 2 to program a desired tune.

Total play time of each programmed tune will be displayed.



When 21 or more tracks are programmed, the letter "- F"(full) will be displayed, and programming will not thereafter be accepted.

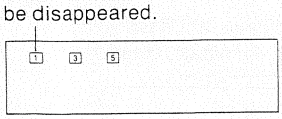


■ To cancel a track number selected in error, press the clear button.

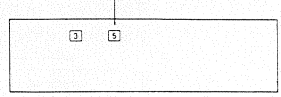
(Only the most recently selected track number will be canceled.)

Example:
After the 3rd, 5th and 1st tracks have already been selected, to change the second selection (the 5th track) ...

① **Press the clear button.**
The "1" (the most recently selected track number) will be disappeared.



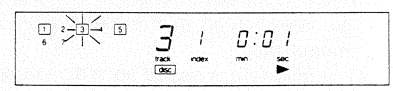
② **Press the clear button.**
The "5" (the second selection) will be disappeared.



③ **After steps 1 and 2 above, next select the tracks in the order desired.**

4 Press ▶.

(Play will start in order.)



Note:
When the playing of the programmed track has finished, that programmed track number will be canceled.

Note:
- If this is pressed during the programmed play, all selections will be canceled, and play will be in the sequence from track now playing to the last track on the disc.
- If the ■ button is pressed, all programmed selections will be canceled.

■ To program during disc play ...

Do so that the programming operation (steps 1 and 2 above) is not interrupted. If there is an interruption of 30 seconds or more, disc play will return to the display of the track now being played. If this happens, repeat steps 1 and 2 once again.

■ When confirming the order of the programmed track during play press the recall button of the remote-control transmitter.

(The presetted track number will be displayed consecutively.)
(Refer to page 14.)

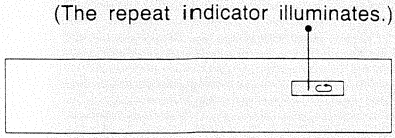
Repeat play

To repeat all tracks or certain programmed tracks...

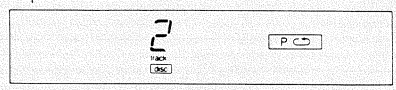
Repeat play is possible:
- Of all tracks (during automatic play).
- Of programmed tracks (during programmed play).
- From the specified track to the final track (during direct play), after which there is a return to the first track, and then all tracks are repeat played.

■ Press the repeat button before or during play.

(The repeat indicator illuminates.)

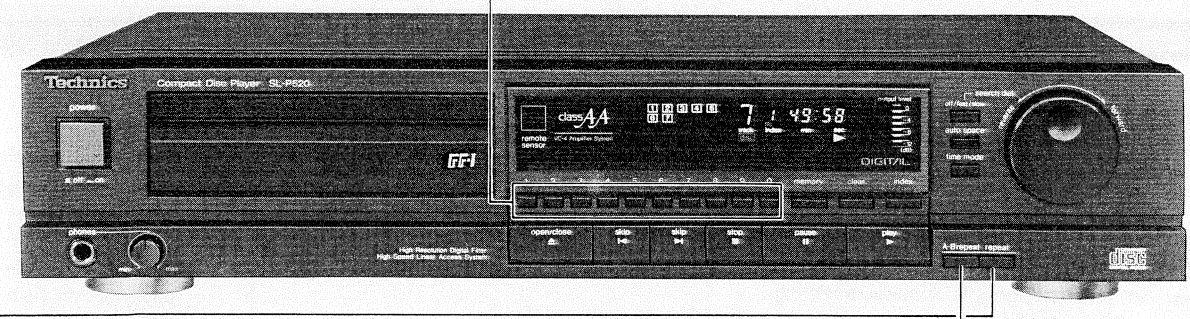


- To set the number of times of repeat play, first press the numeric buttons corresponding to the track desired number of times, and then press the repeat button.



The number of times of repeat play and P indication will be displayed.
The "P" will be illuminated only when the number of times is specified.

Note:
If the repeat button is pressed during programmed play, the tracks already played will not be repeated.



- **To cancel, press the repeat button again.**
(The repeat indicator will be disapeared.)

To repeat desired places (A-B repeat play)

① Press A-B repeat at the place where you want the repeat performance to begin. (to select point A)

Illuminate

② Press A-B repeat at the point where you want to end the repeat play. (to select point B)

Illuminate

To cancel, press the A-B repeat button again.
(The A-B repeat indicator illumination will stop.)

Note:
1. This cannot be done during programmed play.
2. The number of times cannot to be done in the A-B repeat play.

ENGLISH

Convenient Functions

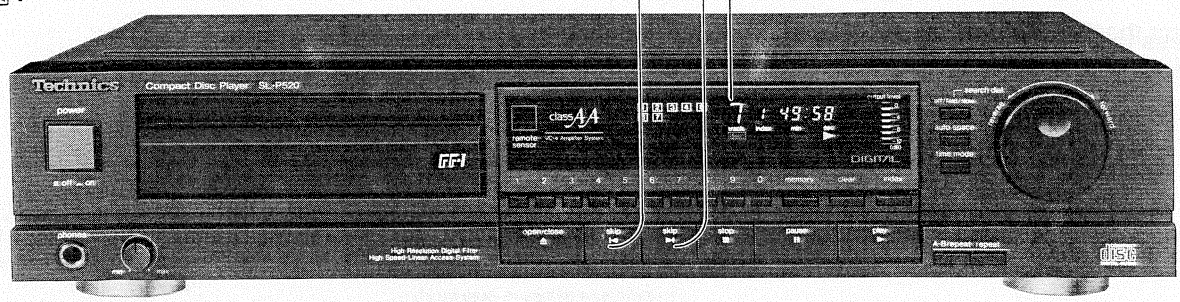
To listen to certain tracks in random order (skip play)

When, while a track is playing, you decide you want to listen to the next track, or to listen once again to the track now playing, either track can be quickly and easily located for play.
While watching the track number display, press until the number of the desired track appears.

To find the beginning of the track now playing (or a previously played track) and play it again, press ◀◀.

To play the next track, press ▶▶.

Track number display



Notes:

1. During programmed play, the order of play will be as programmed. Note, however, that it is possible, for repeat play of programmed play, to also skip directly to a track already played.
2. "A-B repeat play" will be cancelled if the skip play is performed during "A-B" repeat play.

To search for a certain track (search play)

During play, you can go quickly to any other track (forward or backward) on the disc.
By listening to the sounds, the track beginning can be precisely found.
If the pause button is pressed, the player will change to the play stand-by mode after the beginning of the desired track is found.

1 Select the speed mode by the off/fast/slow :

fast: Set to this position for quick searching.
(One rotation of the dial is equivalent to about 20~40 seconds of play.)
slow: Set to this position for searching at a slower speed.
(One rotation of the dial is equivalent to about 1 seconds of play.)
(The search-speed indicator will illuminate.)
off: Set to this position when the search dial is not being used.
(The search-speed indicator illumination will stop.)

2 Search for the desired position.

Turn to the right to move forward on the disc.
Turn to the left to move backward on the disc.

Note:
Although the search speed will vary according to the speed at which the dial is turned, the speed will not exceed the speed set for each mode.

Search-speed indicators

■ **When the remote-control transmitter is used, the desired position can be found at a constant search speed.** (Refer to page 14.)

Notes:

1. During programmed play, search is possible only within the track now playing.
   For any other track, skip to find the beginning of the desired track and begin the search.
   When the button is released at the end of the played time; the next track will be played.
2. For A-B repeat play, it is possible to search outside the A-B pattern.
   Then, when ▶▶ is pressed, there will be a return to "A" point originally selected.

For preset-time play, (make the setting in the stop mode)

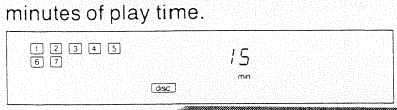
You can select a certain desired length of time for play.
The following explanation is based upon a preset play time of only 15 minutes.

2 **Using the [1]~[0] buttons, set the play time.**

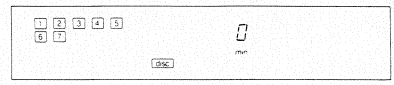
Any length of time (in one-minute units) from one to 99 minutes can be selected.

Example:

Press the [1] button and the [5] button to set for 15 minutes of play time.



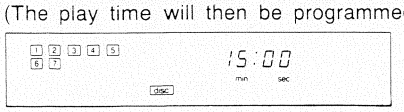
1 **Press the [time mode] button.**



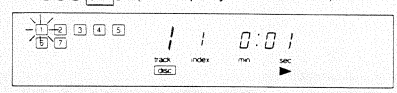
If the wrong setting is made, press the [clear] button, and repeat steps 1, 2 and 3. Also press the [clear] button to cancel the setting.

3 **Press the [memory] button.**

(The play time will then be programmed.)



4 **Press [▶].** (The play will start.)



There is a pause after the selected time has passed.
Press the [▶] button for play again for the selected time.

■ When combined with other play modes ...

After the selected time (15 minutes)

- For automatic play (Refer to page 6.) or direct play (Refer to page 7.), the play will change to the pause mode.
- For programmed play (Refer to page 8.), play will change to the play stand-by mode for the next programmed track.
  If there is not a next programmed track, the play will change to the stop mode.

Note:

- Time of skip and search play is not included in the preset time.

■ Convenient uses

When recording from a compact disc to tape, the programmed play feature can be used to select tracks for recording to fit the length of tape being used.

Example: When using a 60-minute tape

Because there is a 30-minute recording time on each half of the tape, select a play time of 30 minutes, and then next program the desired tracks and start the recording.

■ To check the remaining amount of selected play time ...

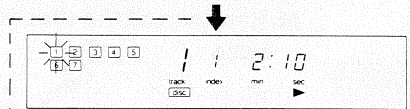
After selecting the time and programming the tracks, it is possible to check how many minutes of play time remain.

(If, at this time, the "-FF:FF" display appears, this means that the play time has exceeded the selected length of time, so one or more programmed tracks must be deprogrammed.)

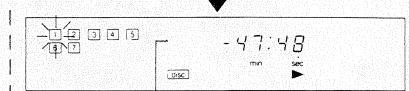
To select the time display ...

Press [time mode]. (during play mode or pause mode)

The displays change as shown below each time the button is pressed.

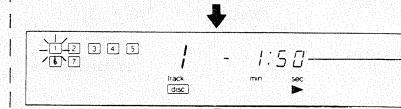


Track number and elapsed play time of tune currently being played.
(Condition before button is pressed)

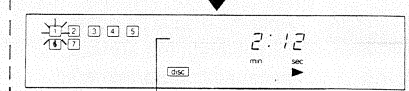


Total remaining time on the disc
(Total remaining time of programmed tunes if during programmed play.)
(Remaining preset play time if during preset-time play.)

"P" will be displayed on the track number display during preset-time play.



Remaining time of track now playing.
Remaining time of first tracks.



Total elapsed play time.
(Total elapsed time of programmed tunes if during programmed play.)
(Total elapsed preset play time if during preset time play.)

"P" will be displayed on the track number display during preset-time play.

Note:

The "--:--" display will appear on the time in the following instances.

- When the 21st track (or higher) is played.
- When the 21st track (or higher) is programmed.
- When the total programmed time exceeds 99 minutes.

To return to the original display, press the [time mode] button after play starts.

ENGLISH

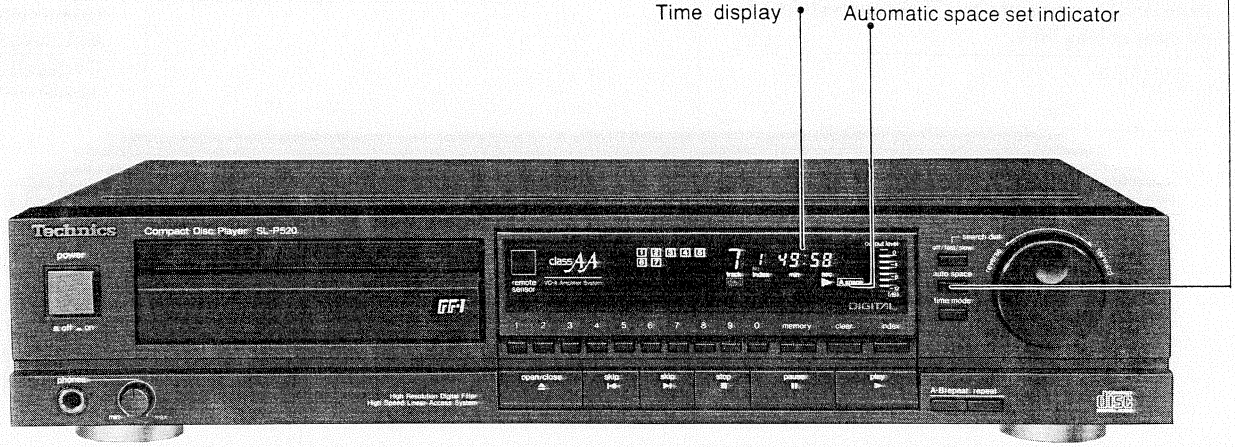
Convenient Functions (continued)

To make automatic spaces between tracks...

(automatic spacing function)
A space (of about three seconds) can be automatically made between tracks. (This feature can be conveniently used, when recording from the compact disc, in order to make unrecorded spaces between tracks.)

Press the auto space button.
(The auto space indicator will illuminate.)
(After the time-display indicator has displayed 3 → 2 → 1, play will begin.)

■ To cancel ...
Press the auto space again.
(The automatic-space indicator illumination will stop.)



About Compact Discs

Noise can be caused if the disc is dirty, scratched, warped, etc. Please note the following points.

Compact Disc identification...

COMPACT disc DIGITAL AUDIO

Use compact discs bearing this mark.

Storage hints

■ Be sure to use the special case.

- Heating equipment and places where the temperature is high.
- Places where there is high humidity or excessive dust.
- Keep discs in a place away from the direct heat from heating equipment, etc.

Be especially careful not to leave discs near the front or rear windows in a vehicle, or inside the dashboard.

Handling cautions

■ On the label of compact discs...

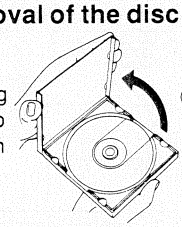
- Do not write with a ballpoint pen, etc. on the label.
- Do not attach any type of paper, label, etc.

Handling notes

Take care not to scratch the disc surface by a fingernail, etc. when handling the disc.

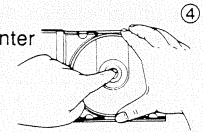
■ Removal of the disc from the case

① Holding the top at both sides,



② gently press the sides of the top to open.

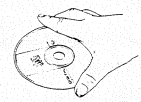
③ Press the center holder.



④ Lift by the edges (Don't touch the recorded surface.)

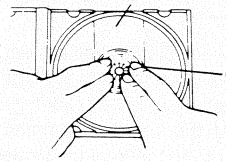
■ How to hold the disc

Hold the disc at its edges. (Don't touch the surface, because fingerprints will remain.)



■ When storing to the case

① Insert with label facing up.

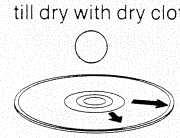


② Press downward at the center.

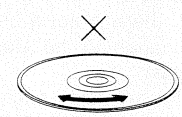
Maintenance

■ If discs are dirty...

Clean with a soft, damp cloth, and wipe till dry with dry cloth.



Always from the center outward.



Noise can be caused by scratches.

■ If condensed moisture is on the disc surface ...

If condensed moisture forms on the disc surface (such as when it is brought from a cold place to a warm place), wipe the moisture away by using a soft, dry cloth.

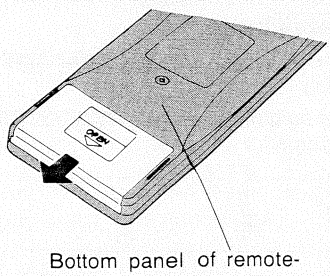
■ Don't use the following...

- Anti-static cleaners, etc. such as used on ordinary phonograph records.
- Benzine, paint thinner, or any other solvents.
- Never dry by using a hair dryer, etc.

To Operate by the Remote-Control Transmitter

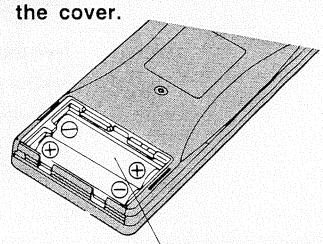
Insertion of remote-control transmitter batteries

1. Open the cover.



Bottom panel of remote-control transmitter

2. Insert the batteries and close the cover.



Use two AA-size (IEC-R6: 1.5V) batteries.

■ To remove the batteries

Follow the reverse of procedure 2.

■ Battery life

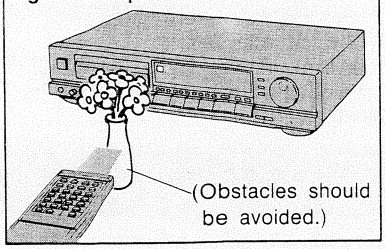
About 1 year.

■ Notes concerning use of dry batteries

- Be sure the batteries are inserted so that the positive (+) and negative (−) polarities are correct. Batteries installed with incorrect polarities may leak and damage this unit.
- Never subject the batteries to excessive heat or flame; do not attempt to disassemble them; and be sure they are not short-circuited.
- If the unit is not to be used for a long time, remove the batteries and store them in a cool dark place.
- Always remove old, weak or worn-out batteries promptly and dispose of them.
- Never mix old and new batteries, nor batteries of different types. (Carbon or Alkalin.)

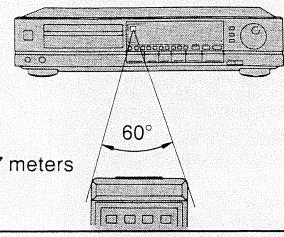
Remote-control transmitter operation notes

Face it toward the remote-control signal receptor.

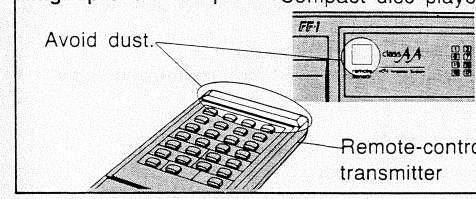


(Obstacles should be avoided.)

Use the remote-control transmitter within 7 meters.

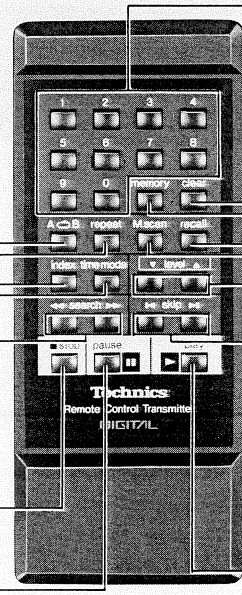


Be sure the transmitter part of the remote-control transmitter and the receptor part of the Compact disc player are free from dust. Excessive dust might prevent reception. Compact disc player



Control names

Refer to page 4~5 about controls functions.
Refer to page 14 about Ⓐ, Ⓑ, Ⓒ and Ⓓ buttons.



A-B repeat button (A ⊂⊃ B)
(Refer to page 9.)

Repeat button (repeat)
(Refer to page 9.)

Index button (index)
(Refer to page 7.)

Time-display selector (time mode)
(Refer to page 11.)

Ⓐ Search buttons (search/◀◀ • ▶▶)

Stop button (stop/■)
(Refer to page 6.)

Pause button (pause/❚❚)
(Refer to page 6.)

Numeric buttons (1~0)
(Refer to page 7~9, 11~12.)

Clear button (clear)
(Refer to page 8, 11.)

Memory button (memory)
(Refer to page 8, 11.)

Ⓑ Program-recall button (recall)

Ⓒ Music scan button (M.scan)

Ⓓ Digital volume attenuation buttons (level/▼•▲)

Skip buttons (skip/|◀ • ▶|)
(Refer to page 10.)

Play button (play/▶)
(Refer to page 6.)

ENGLISH

To Operate by the Remote-Control Transmitter (continued)

Convenient uses of the remote-control transmitter

Ⓒ For music scanning ...

The first part of each track is played in sequential order. This is convenient to find the track when you don't know the title of the track you want to hear (but know the melody), or when you don't know the track number.

■ If no length of play time has been selected ...

The first part of each track will be played for approximately ten seconds.

Press the M.scan button.

(The music scan indicator will illuminate, and play will begin.)

■ If the length of play time is selected ...

The length of time of play (of the beginning of each track) can be any desired time from one to 99 seconds.

- The time can be changed during music scan by following steps 1 and 2.

1. Select the desired time by pressing the appropriate numeric button (s).

[Example: For 20 seconds, press the 2 and 0 buttons.]

2. Press the M.scan button.

(The music scan indicator will illuminate, and play will begin.)

■ To cancel ...

Press the ■ button.

(The music scan indicator illumination will stop.)

Notes:

- If the ▶ button is pressed during music scanning, there will be a change to play at that point (the music scanning will be canceled).
- When the music scanning finishes, it will be automatically canceled, and play will begin from the beginning of a first track.
- Once the time has been set, this time will remain in the memory until either the time is reset or the power is switched OFF.

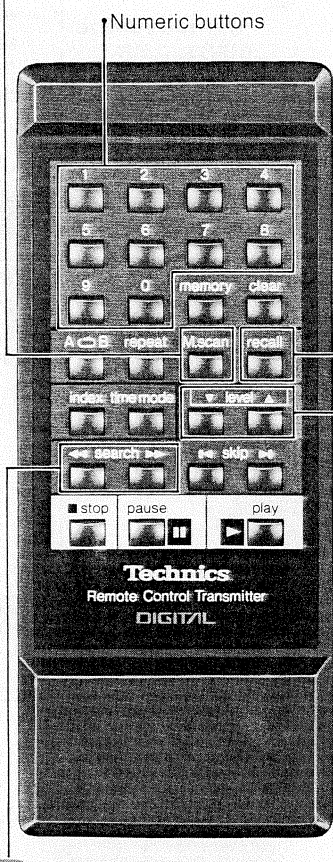
Ⓐ For search play ...

The search operation, at a constant speed and at a volume level that is about 1/4 of the usual play volume level, is possible.

- To move backward quickly on the disc, press and hold ◀◀ button, and then release it at the desired position.
- To move forward quickly on the disc, press and hold ▶▶ button, and then release it at the desired position.

Notes:

1. When the button is pressed, the search will be slow at first; if it is pressed and held for approximately three seconds or more, the search will become faster.
2. During programmed play, search is possible only within the track now playing.
   For any other track, skip to find the beginning of the desired track and begin the search.
   When the button is released at the end of the played time; the next track will be played.
3. For A-B repeat play, it is possible to search outside the A-B pattern. Then, when ▶ is pressed there wil be a return to "A" points originally selected.

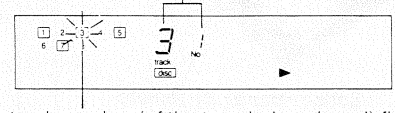


Ⓑ To confirm programmed play selections ...

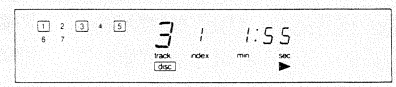
Press the recall button.

(The programmed track numbers will be displayed in sequential order.)

Display of the programmed track numbers and the programmed order



The track number (of the tune being played) flashes.



(When the display of programmed play selections is finished the display will return to the display of data for the track being played.)

Note:

There will be no display of contents for programmed tracks that have already played.

Note that the data for all programmed tracks will be displayed in sequential order if the repeat button is pressed before play begins.

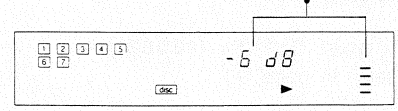
Ⓓ To adjust the output level during play ...

To reduce the volume level, this adjustment can be made at the remote-control transmitter; it is not necessary to use the volume control on the amplifier.

- **Each time the ▼ button is pressed, the volume level is attenuated by 2 dB, up to a maximum attenuation of −12 dB.**
- **Press the ▲ if the volume level is reduced too much, or to return to the previous level.**

(Displayed in the output level indicator.)

(A 6 dB attenuation is shown.)



After illumination for two seconds, there will be a change to the time display.

Notes:

- There is an automatic change to 0 dB when the power is switched OFF.
- When headphones are used, the volume level of headphones sound can also be attenuated at the same time.

Notes

■ Do not take apart this unit or attempt to make any changes yourself.

This unit is a very intricate device that uses a laser pickup to retrieve information from the surface of compact discs. The laser is carefully shielded so that its rays remain inside the cabinet. Therefore, never try to disassemble the unit or alter any of its parts since you may be exposed to laser rays and dangerous voltages.

■ Close the disc holder when not in use.

There is a precision-made focusing lens in the back of the disc holder which cannot be seen from the outside. Always close the disc holder when not using the unit to protect this lens from dirt and dust. Also, never try to touch this lens.

■ Handle with care when carrying or storing the unit so it is not subjected to any strong bumps.

Always remove the disc before storing the unit for any period of time.

■ About dew

Dew is often seen as water build-up on the inside of the windows in a warm room on a cold winter day. Dew can also form inside this unit in a similar manner in the following cases:

- Immediately after a heater has been turned on.
- In a steamy or very humid room.
- When the unit is suddenly moved from a cold environment to a warm one.

If dew forms inside this unit, it may not operate properly. To correct this problem, turn on the power and wait about 20 or 30 minutes for the moisture to evaporate.

■ Maintenance of External Surfaces

To clean this unit, use a soft, dry cloth.
If the surfaces are extremely dirty, use a soft cloth, dipped into a soap-and-water solution or a weak detergent solution.
Wring the cloth well before wiping the unit.
Wipe once again with a soft, dry cloth.
Never use alcohol, paint thinner, benzine, nor a chemically treated cloth to clean this unit.
Such chemicals may damage the finish of your unit.

Suggestions for Safety

■ Use a standard electrical AC wall outlet

1. **Use from an AC power source of high voltage, such as for air conditioners, is very dangerous.**
   Be extremely careful not to make a connection to the electrical outlet for a large air conditioner or central-heating unit which uses high voltage, because there is the possibility of fire.
2. **A DC power source cannot be used.**
   Be sure to check the power source carefully, especially on a ship or other place where DC is used.

■ Connection and removal of the power cord plug

1. **Wet hands are dangerous.**
   A dangerous electric shock may result if the plug is touched by wet hands.
2. **Don't pull the power cord.**
   Always grasp the plug; never pull the cord itself.

■ Never attempt to repair or reconstruct this unit

A serious electric shock might occur if this unit is repaired, disassembled or reconstructed by unauthorized persons, or if the internal parts are accidently touched.

■ For families with children

Never permit children to put anything, especially metal, inside this unit. A serious electric shock or malfunction could occur if articles such as coins, needles, screwdrivers, etc. are inserted through the ventilation holes, etc. of this unit.

■ Turn off after use

If the unit is left for a long time with the power on, this will not only shorten its useful operation life, but may also cause other unexpected trouble.

■ If water is spilled on the unit

Be extremely careful if water is spilled on the unit, because a fire or serious electric shock might occur. Immediately disconnect the power cord plug, and consult with your dealer.

■ Place the unit where it will be well ventilated, and away from direct sunlight

Place this unit at least 10 cm (4") away from wall surfaces, etc., and away from direct sunlight.

■ Keep the unit away from heaters, etc.

Heat can damage the external surfaces as well as internal circuits and components.

■ Avoid spray-type insecticides

Insecticides might cause cracks or "cloudiness" in the cabinet and plastic parts of this unit. The gas used in such sprays might, moreover, be ignited suddenly.

■ Never use alcohol or paint thinner

These and similar chemicals should never be used, because they may damage the finish.

■ If trouble occurs

If, during operation, the sound is interrupted or indicators no longer illuminate, or if abnormal odor or smoke is detected, immediately disconnect the power cord plug, and contact your dealer or an Authorized Service Center.

ENGLISH

Troubleshooting Guide

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.
If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to the directory of Authorized service centers (enclosed with this unit) to locate a convenient service center, or consult your Technics dealer for instructions.

While listening to a compact disc		
The disc holder does not close when a disc is inserted and the disc holder-open button is pressed.	The disc is warped or bent.	• Take it out and insert it again.
The disc is inserted but the total number of tracks and total playing time is not displayed.	The lock rod is locked.	• Press inward to unlock.
	The disc is upside down.	• Be sure the label is facing upward.
	The disc is dirty.	• Wipe with a soft cloth.
	The disc is scratched.	• Replace with a new disc.
	The disc is warped.	
	The disc is not within specified standards.	• Exchange the disc for another one.
	Moisture has condensed in the unit.	• Switch ON the unit and wait about 30 minutes before using the unit.
A certain MUSIC PASSAGE can't be played correctly.	The lock rod is locked.	• Press inward to unlock.
	The disc is dirty.	• Wipe with a soft cloth.
	The disc is scratched.	• Skip over the scratched part when playing.
The time between tracks seems too long.	The automatic-space indicator (A. space) is illuminated.	• Press the automatic-space button to release it.
The display panel shows the elapsed play time.	The time mode (time display) is set to another mode.	• Press the time-display selector to select the desired time-display mode.
Play starts, but sound is lower than usual.	The output-level indicator is not entirely illuminated.	• Press the digital volume attenuation buttons (on the remote-control transmitter) to the 0 dB.
There is noise from the tuner or disturbance on the TV screen.	Caused by high-frequency signals of this unit.	• Use this unit farther away from the tuner or TV. • If the tuner's or TV's antenna is the indoor type, use an outdoor antenna.
Operation by remote-control transmitter is not correct.	No disc is loaded.	• Insert the disc.
	The remote-control transmitter batteries are consumed.	• Replace them with new batteries.
	There is an obstruction between the remote-control transmitter and this unit.	• Remove the obstruction.
	The remote-control transmitter is not correctly facing this unit.	• Face the remote-control transmitter correctly toward this unit.